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| APPLICATION NO.                          | FILING DATE                 | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-----------------------------|----------------------|---------------------|------------------|
| 10/015,548                               | 12/11/2001                  | Robert Crites        | 10235-026001        | 4275             |
| <sup>26161</sup><br>FISH & RICH <i>A</i> | 7590 07/20/201<br>ARDSON PC | EXAMINER             |                     |                  |
| P.O. BOX 1022                            |                             | LASTRA, DANIEL       |                     |                  |
| MINNEAPOLIS, MN 55440-1022               |                             |                      | ART UNIT            | PAPER NUMBER     |
|  |                             |                      | 3688                |                  |
|  |                             |                      |                     |                  |
|  |                             |                      | NOTIFICATION DATE   | DELIVERY MODE    |
|  |                             |                      | 07/20/2010          | ELECTRONIC       |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

|  |   | Application No.  | Applicant(s)          |  |  |  |
|--|---|--|-----------------------|--|--|--|
| Office Action Summary  |   | 10/015,548   | CRITES, ROBERT        |  |  |  |
|  |   | Examiner   | Art Unit              |  |  |  |
|  |   | DANIEL LASTRA  | 3688                  |  |  |  |
| Period fo  | The MAILING DATE of this communication app<br>or Reply  | ears on the cover sheet with the c   | orrespondence address |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |  |                       |  |  |  |
| Status   |   |  |                       |  |  |  |
| 1)[\]  | Responsive to communication(s) filed on 19 Ma   | av 2010  |                       |  |  |  |
| -  | This action is <b>FINAL</b> . 2b) This action is non-final.   |  |                       |  |  |  |
| ′=   | <i>⁄</i> —  |  |                       |  |  |  |
| 3)[  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. |  |                       |  |  |  |
|  | closed in accordance with the practice under z  | x parte Quayle, 1900 C.D. 11, 40   | 0.0.210.              |  |  |  |
| Dispositi  | on of Claims  |  |                       |  |  |  |
| 4)🛛  | ☑ Claim(s) <u>1-31</u> is/are pending in the application.   |  |                       |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |                       |  |  |  |
| 5)   | 5) Claim(s) is/are allowed.   |  |                       |  |  |  |
| 6)🖂  | 6)⊠ Claim(s) <u>1-31</u> is/are rejected.   |  |                       |  |  |  |
|  | Claim(s) is/are objected to.  |  |                       |  |  |  |
| ·  | Claim(s) are subject to restriction and/or  | r election requirement.  |                       |  |  |  |
| Application Papers   |   |  |                       |  |  |  |
| 91□.   | The specification is objected to by the Examine   | r  |                       |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.   |   |  |                       |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |                       |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.05(a).  |   |  |                       |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |  |                       |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |                       |  |  |  |
|  | •   |  |                       |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |   |  |                       |  |  |  |
| 2)  Notic 3) Inforr  | t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date   | 4)  Interview Summary<br>Paper No(s)/Mail Da<br>5)  Notice of Informal P<br>6)  Other: | te                    |  |  |  |

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#### **DETAILED ACTION**

1. Claims 1-31 have been examined. Application 10/015,548 (METHOD FOR CONTACT STREAM OPTIMIZATION) has a filing date 12/11/2001

# **Response to Amendment**

2. In response to Non Final Rejection filed 12/09/09, the Applicant filed an Amendment on 05/19/10, which amended claims 1, 6, 15, 20, 27-28, 31.

# Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15, 27 and 31 recite the limitation "the merged list". Claims 20 and 28 recite "the second list". There is insufficient antecedent basis for these limitations in the claims.

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 7-8, 15, 20-21 and 27-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Kepecs (US 2001/0032128).

Claim 1, Kepecs teaches:

A computer-implemented method of determining a prioritized listing of offers for use to contact potential customers, the method comprises:

generating by a computer an ordered listing of offers from a set of offers, by which to contact a potential customer from a group of potential customers by considering the potential customer independently from others of the potential customers in the group, during generating of the ordered list of offers for the potential customer (see paragraphs 12, 66)

with generating comprising:

assigning offers by the computer based on individual attributes of the potential customer independently of corresponding attributes of the others of the potential customers in the group (see paragraph 27 "offers are customized for each individual consumer based on the particular consumer's purchase or shopping history and the consumer response to the offers"; see paragraph 96);

repeating generating for subsequent others of the potential customers to produce corresponding ordered lists (See paragraph 66-68): and

producing by a computer a second list of offers that is a list provided from the ordered lists of offers from the one and subsequent others of the potential customers, with the second list based upon a budget for contacting the potential customers in the group, (see paragraph 34, 66, 93, 94). Kepecs's system can use a GUI (see figure 6) to

create a first list of offers with for example, by setting Budget parameters to zero (see shown in figure 6, paragraph 93), and print said first list of offers (see paragraphs 45-46) and then later create a second list of offers by setting budget parameters not to zero and print said second list of offers. Said second list of offers would be a truncated version of the first list of offers due to budget constraints.

Claim 2, Kepecs teaches:

eliminating offers that are mutually exclusive from the ordered list of offers (see paragraphs 144 "Brand X offers at \$3, \$4, \$2 are mutually exclusive).

Claim 3, Kepecs teaches:

wherein the ordered list of offers is prioritized based on highest expected profit (see paragraph 12).

Claim 4, Kepecs teaches:

wherein generating further comprises: filtering out illegal offers from the set of offers for each member of the group of potential customers (see paragraph 94 "not to generate an offer that would cause the maximum budget limit to be violated").

Claim 5, Kepecs teaches:

producing an alternative ordered list of offers having N offers if a number of offers exceeds a number N of offers allocated for a potential customer (see paragraph 72 "filler offers").

Claims 7, 20 and 28, Kepecs teaches:

A computer-implemented method of determining a prioritized number of offers to contact customers from a group of potential customers, the method comprising:

determining by a computer an ordered list of offers to be sent to a potential customer (see paragraph 66),

repeating determining by the computer of ordered lists for subsequent others of the potential customers (See paragraphs 66-68);

producing a second list of offers from the ordered lists of offers from the one and subsequent others of the potential customers, with the second list being further based upon a budget for contacting the potential customers in the group, and for a potential customer (see paragraph 93-94).

eliminating any offers that are not applicable to the potential customer based on eligibility rules for the offer or offers for which an expected profit for the potential customer is below a threshold amount (see paragraph 62-69, 135-136); and

ordering remaining offers by expected profit (see paragraph 62-69, 166).

Claims 8 and 21, Kepecs teaches:

producing a proposed solution having an ordered list of N offers where N is the lesser of the total remaining offers and the maximum number of offers allowed for the potential customer (see paragraph 64 "maximum number of offers that may be presented to a consumer via a particular channel").

Claims 15 and 27, Kepecs teaches:

sorting the second list of offers by return on investment and truncating offers at the bottom of the second list of offers (see paragraphs 93-94).

Claim 31, Kepecs teaches:

sorting the second list of offers by return on investment and truncate offers at the bottom of the second list of offers (see paragraph 93-95).

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Kepecs</u> (US 2001/0032128).

#### Claim 6, Kepecs teaches:

eliminating any offers that are not applicable to each customer based on eligibility rules for the offer or offers for which an expected profit for the potential customer is below a threshold amount (see paragraph 139 "eliminating offers that were not successful") but does not expressly teach when rule violated generating one or more alternative offers in order of profitability, performing an ordered merge of the one or more alternative offers according to profitability with the original list of offers. However, it would obvious to a person of ordinary skill in the art at the time the application was made, to know that if a rule is violated, then Kepecs would continue for example, to present to customers offers that for example, were not successful with the only conditions that states which makes offers

which are better for a retail store would be located a the top of the list of offers while states which generates offers which are better for the consumer would be located toward the bottom of the list (see paragraph 166).

6. Claims 9-14, 16-19, 22-26 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Kepecs</u> (US 2001/0032128) in view of <u>Galperin</u> (US 6,993,493).

Claims 9, 22 and 29, Kepecs does not teach:

wherein the proposed solution is represented as a bit string of a length that is equal to the total of the remaining offers. However, <u>Galperin</u> teaches a promotion optimization system where a bit string length is used to determine the total remaining offers to present to a customer (see col 3, lines 20-30 "1, if offer j goes to a customer i; = 0 otherwise"). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that <u>Kepecs</u> would modify his invention in order to determine the remaining offers to display to a consumer using a bit string matrix, as taught by <u>Galperin</u> in order to meet the maximum number of offers per customer constraint.

Claims 10, 23 and 30, Kepecs teaches:

The method of claim 9 wherein the proposed solution is checked against rules of the form (M,S) meaning at most M offers from set S can be sent to a potential customer (see paragraph 64 "maximum number of offers that may be presented to a consumer via a particular channel").

Claims 11 and 24, Kepecs does not teach:

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wherein if an (M,S) rule is violated, a list of new alternative proposed solutions is generated by: determining a number of bits T > M from the set S that indicate offers should be sent in the proposed solution; generating new alternative proposed solutions each proposed solution containing new alternative offers, wherein each new alternative offers is represented in a bit string by setting T-M number of bits that are not a part of the set S, and which immediately follow a rightmost one bit R1 in the proposed solution. However, <u>Galperin</u> teaches a promotion optimization system where a bit string length is used to determine the total remaining offers to present to a customer (see col 3, lines 20-30 "1, if offer j goes to a customer i; = 0 otherwise"). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that <u>Kepecs</u> would modify his invention in order to determine the remaining offers to display to a consumer using a bit string matrix, as taught by <u>Galperin</u> in order to meet the maximum number of offers per customer constraint and the number of alternative or fillers offers to present to customers (see <u>Kepecs</u> paragraph 72).

Claims 12 and 25, Kepecs does not teach:

generating alternative proposed solutions based on all combinations of the T one bits up to R1 and any zero bits in set S between R1 and R2 containing M one bits. However, <u>Galperin</u> teaches a promotion optimization system where a bit string length is used to determine the total remaining offers to present to a customer (see col 3, lines 20-30 "1, if offer j goes to a customer i; = 0 otherwise"). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that <u>Kepecs</u> would modify his invention in order to determine the remaining offers

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to display to a consumer using a bit string matrix, as taught by <u>Galperin</u> in order to meet the maximum number of offers per customer constraint and the number of alternative or fillers offers to present to customers (see Kepecs paragraph 72).

Claims 13 and 26, Kepecs teaches:

wherein a new alternative proposed solution is merged with any preceding list of proposed solutions (see paragraphs 68-69).

Claim 14, Kepecs teaches:

wherein the list of proposed solutions is checked in decreasing order of profitability (see paragraphs 68-69).

Claim 16, Kepecs does not teach:

flagging potential customers who are truncated for an offer and rerunning flagged customers after removing exhausted offers and offers that the flagged potential customers were already approved for, while lowering a maximum number of allowed offers for the flagged potential customers. However, <u>Galperin</u> teaches a promotion optimization system where customers are ranked-ordered in a list based upon propensity to respond to an offer, where a percentage of the list is selected to receive the offer (see col 1, lines 35-42). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that <u>Kepecs</u> would modify his invention to determine the customers from a list that did not receive an offer, as taught by Galperin in order to target said customers with offers.

Claim 17, Kepecs teaches:

wherein truncating occurs at a boundary defined by a constraint on the method (see paragraphs 68-69).

Claim 18, Kepecs teaches:

wherein truncating is selectable by the user (see paragraphs 68-69).

Claim 19, Kepecs teaches:

wherein truncating occurs based on individual variance of profit from a potential customer with potential customers having low variance being truncated for certain offers before potential customers having high variance (see paragraphs 68-69).

## **Response to Arguments**

7. Applicant's arguments filed 05/19/10 have been fully considered but they are not persuasive. The Applicant argues that <a href="Kepecs">Kepecs</a> does not teach assigning offers by the computer based on individual attributes of the potential customer independently of corresponding attributes of others of the potential customers in the group because according to the Applicant, <a href="Kepecs">Kepecs</a> states that the purchase history for a group of consumers is considered in generating an offer to a consumer from a group of consumer. The Examiner answers that <a href="Kepecs">Kepecs</a> teaches in paragraphs 27 and 96 that offers are customized for each individual consumer based on the particular consumer's attributes such as purchase or shopping history and the consumer response to the offers. Therefore, contrary to Appellant's argument, <a href="Kepecs">Kepecs</a> teaches Applicant's claimed invention.

The Applicant argues that <u>Kepecs</u> does not teach repeating generating for subsequent others of the potential customer to produce corresponding ordered lists".

The Examiner answers that <u>Kepecs</u> teaches generating a sorted list of offers for a customer (see paragraph 66). Therefore, contrary to Appellant's argument, <u>Kepecs</u> teaches Applicant's claimed invention.

The Applicant argues that <u>Kepecs</u> does not teach producing a second list of offers that is a list provided from the ordered lists of offers from the one and subsequent others of the potential customers, with the second list based upon a budget for contacting the potential customers in the group. The Examiner answers that users of the <u>Kepecs</u>'s system can use a GUI (see figure 6) to create a first list of offers with for example, by setting Budget parameters to zero (see shown in figure 6, paragraph 93), and print said first list of offers (see paragraphs 45-46) and then later create a second list of offers by setting budget parameters not to zero and print said second list of offers. Said second list of offers would be a truncated version of the first list of offers due to budget constraints. Therefore, contrary to Applicant's argument, <u>Kepecs</u> teaches Applicant's claimed invention.

#### Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to DANIEL LASTRA whose telephone number is 571-272-

6720 and fax 571-273-6720. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, LYNDA C JASMIN can be reached on (571) 272-6782. The official Fax

number is (571) 273-8300.

Information regarding the status of an application may be obtained from the

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applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

/DANIEL LASTRA/

Primary Examiner, Art Unit 3688

July 14, 2010